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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
Office of the Chief Surgeon
APO 887

Ch Surg 707 x 441.5 x 444.2

31 May 1945

CIRCULAR LETTER NO. 48

Elective Surgery - - - - -	Section I
Identification of Medicinal Gases - - - - -	Section II
Unsatisfactory Diphtheria Antitoxin - - - - -	Section III
Amendment to Current Directive - - - - -	Section IV

SECTION I. ELECTIVE SURGERY

1. The term "elective surgery" applies to conditions where surgery may be of benefit, but the delayed application of which will not jeopardize the patient's eventual health or function. It does not apply to procedures required in the care of battle casualties, such as the delayed closure of wounds.

2. Major elective surgery may be performed in this theater only if the patient can return to duty within 60 days and if convalescence can be continued in the hospital performing the operation, or in convalescent hospitals.

3. Exceptions to the above policy (i.e. a period of hospitalization longer than 60 days) may be made under the following conditions:

a. Key personnel.

b. Malignant disease where delay might jeopardize the patient's life.

c. Conditions where the continuance or aggravation of the disease might jeopardize the patient's health (example: impact of common duct stone).

4. The following conditions will not be operated upon in ETO:

a. Direct, recurrent, and bilateral indirect inguinal herniae.

b. Strabismus.

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- 1 -

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SECTION II. IDENTIFICATION OF MEDICINAL GASES

1. Administrative Memorandum No. 59, Off Ch Surg, "Identification of Medicinal Gases", 29 Apr 1944, has been rescinded.

2. Identification of the gas in each cylinder will be made by the following methods:

a. Reading the chemical symbol of the gas imprinted in the metal of the valve of American and British cylinders.

b. Reading the chemical symbol or the name of the gas imprinted in the metal at the shoulder of the cylinder (symbol, e.g. O for Oxygen, on British cylinders, full name on some American cylinders).

c. Reading the paper label or tag on British or American cylinders.

d. Reading the symbol or name of the gas stencilled on or near the shoulder of British cylinders and in American cylinders on or near the shoulder or in the long axis.

e. By interpreting (See TABLE A) the color or combination of colors with which British or American cylinders are painted. Color markings on a cylinder are only to be considered to corroborate labels. They are never to be used as a single means of identification. In no instance will the color of valve caps be considered significant.

f. American cylinders have been received from the ZI painted lusterless olive drab in accordance with WD TB ENG No. 39, "Safe Handling of Compressed Gases", 16 Sep 1944. This authorizes this color for all cylinders (except aviators breathing oxygen) issued after that date. Olive drab cylinders are stencilled in the long axis with the name of the gas. The valve stems are imprinted with the name of the gas contained. No imprint will be found on the shoulder of these cylinders.

g. To identify gases in cylinders check for all means of identification. Unless all means in evidence agree, the gas should be discarded.

3. Responsibility of Anesthetists.

a. It is the duty of the medical officer acting as chief of the anesthesia and operating room section to check all cylinders as they are being delivered to an installation. Cylinders which are not identifiable will not be accepted for delivery. Cylinders accepted but lacking the stencilled symbol or name of the gas will be stencilled under supervision of the chief anesthetist.

R E S T R I C T E D

b. After identification of the gas contained, cylinders already on hand not bearing the required stencilling of chemical symbols or name of the gas on the cylinder shoulder or on its vertical axis will be stencilled immediately under supervision of the anesthetist. Cylinders lacking adequate identification other than color will be returned, in UK Base, to the British Oxygen Company tagged "Gas not identified, for check and refill". On the Continent they will be returned to the issuing depot, tagged in similar fashion.

c. Stencilling in white paint (luminous if available) will be placed one inch below the shoulder of cylinders in letters one inch high. In the case of American cylinders, immediately below the name of the gas include the words "U.S. Valve", e.g.:

OXYGEN
U.S. VALVE

NITROUS OXIDE
U.S. VALVE

CARBON DIOXIDE
U.S. VALVE

Stencils for the purpose may be obtained from issuing depots.

d. American cylinders legibly stencilled in the long axis need not be stencilled immediately below the shoulder as indicated in 3c.

e. Each hospital will post a Cylinder Identification Colors Chart, ETOUSA MD Form 336, in a conspicuous place in the operating rooms and the attention of all personnel will be drawn to it. In UK Base charts are available on request from Depot M-400, APO 141; on the Continent they may be obtained from Depot M-407, APO 887.

f. Cylinders in the operating room or its environs will be stored in racks divided into compartments, with each compartment adequately marked to indicate the full cylinder to be stored there. Empty cylinders will be stored separately and returned to the issuing facility.

g. Cylinders containing either carbon dioxide or a mixture of carbon dioxide and oxygen, will not be attached to any apparatus employed for production of anesthesia or for inhalation therapy.

h. Cylinders and gas machines will not be covered during either their employment or when standing idle.

i. A tag will be attached to the delivery hose for nitrous oxide close to the yoke insert indicating as follows:

D A N G E R

NITROUS OXIDE

Do not attach to Oxygen Yoke

- 3 -

R E S T R I C T E D

R E S T R I C T E D

k. Oxygen yokes on every anesthetic apparatus (Items 36040 and 93500) will be identified by winding the side arms of the yokes with adhesive or, where possible, they will be painted green.

l. The delivery hose for oxygen will not be tagged nor will the nitrous oxide yokes be altered in appearance.

m. Immediately before starting the administration of any anesthetic, the gas machine will be carefully checked for proper loading with cylinders and proper attachment of delivery tubes to corresponding manometers. The patency of directional valves, pathways within the machine and breathing tubes to and from the patient will also be carefully checked.

n. Having completed the check stipulated in par 3m above, the anesthetist, prior to the administration of the anesthetic, will sign a statement in the patient's record, preferably on the Anesthetic Record, indicating "Equipment checked OK" (Signature).

o. In case of difficulty encountered during the administration of an anesthetic, the cause of difficulty is, in most instances, associated with the patient's condition; nevertheless it shall be the responsibility of the anesthetist to quickly check the gas machine for its continuing adequacy of mechanism and proper loading. The mask will be removed momentarily during this check. If the patient improves spontaneously, the gas machine will not be re-employed until a thorough check is made. If continued anesthesia with a gas machine is necessary another one, known to be in proper working order, and properly loaded, will be used if available.

4. Chain of responsibility.

Chain of responsibility in reference to 3m and n, in the case of nurse anesthetists will be through nurse anesthetist, operating surgeon, senior anesthetist, chief of surgical service to commanding officer. In the case of medical officers administering anesthetics the chain of responsibility will be through senior anesthetist, chief of surgical service to commanding officer.

5. Color schemes and cylinders - supplementary information.

a. Origin of cylinders can be ascertained by recognition of the typical American types of valves on large and small cylinder valves on all of these cylinders deliver from the side. The outlet of the valve on small cylinders (Fig. 1) is flush with the face of the valve, while the outlet of the larger cylinders projects and is threaded (Fig. 2). Threaded outlets may be of two sizes - one on the so-called medical cylinders and a slightly larger outlet on commercial cylinders. Identification may be made by the flat surface of the valve outlet on medical cylinders and by the cup-shaped surface of the valve outlet on commercial cylinders.

b. Particular note is to be taken of the following characteristics of British cylinders:

- (1) The valve outlet threads of non-combustible gases are right hand.
- (2) The valve outlet threads of combustible gases are left hand.
- (3) The fittings are therefore not interchangeable.

c. British cylinders are made in varying sizes and there are three types of valves, i.e.:

- (1) Straight, Type 7 (Fig. 3) delivers gas from the side from a projecting threaded outlet.
- (2) Angle, Type 8 (Fig. 4) delivers gas vertically.
- (3) Bullnose, (Fig. 5) delivers gas vertically.

Types 7 or 8 valves are always found on nitrous oxide cylinders and on 15, 30 and 60 gallon oxygen cylinders, and the bullnose type is found on oxygen cylinders of 20, 40, 100 and 150 cu. ft. capacity.

d. Having identified the origin of the cylinder, one can refer to TABLE A for color schemes to corroborate the label or tag.

e. The British color scheme was adopted in UK Base for cylinders of American origin, but only British cylinders are now issued there. American cylinders painted according to either British or American systems will be encountered on the Continent, and in addition American cylinders painted olive drab may be received. This color is not significant of any one gas.

TABLE A

<u>Cylinders Of</u>	<u>American</u> *	<u>British</u>
Oxygen, Medical	Green	Black with white neck
Oxygen, Commercial	Green **	Black
Carbon dioxide, Inhalation	Grey	Green with black base
Carbon dioxide, Commercial	Grey	Black (CO2 type valve)
Carbon dioxide, Snow making	Grey	Green
Carbon dioxide and oxygen	Grey and Green	Black/green band below white neck
Nitrous oxide	Light Blue	Black
Ethylene	Red	Mauve - red neck
Cyclopropane	Orange	Aluminum painted with red neck
Helium	Brown	Medium Brown
Helium and oxygen	Brown and Green	- - - - -

* Lusterless olive drab cylinders may contain oxygen or any other gas.

** WD TB ENG 39, 16 Sep 1944, stipulates light green for aviators breathing oxygen.

R E S T R I C T E D

6. Captured Cylinders.

Cylinders of origin other than American or British are being found in medical depots and fixed hospital sites occupied by US hospitals. Gases from captured cylinders will not be employed for medicinal purposes.

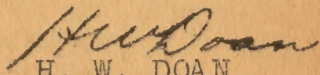
SECTION III. UNSATISFACTORY DIPHTHERIA ANTITOXIN

Diphtheria Antitoxin NOT No. G-072466-A, manufactured by Parke Davis and Company, has been reported as causing severe reaction. This toxin will be withheld from issue pending further instructions from this office.

SECTION IV. AMENDMENT TO CURRENT DIRECTIVE

Par ., Circular Letter No. 146, Off Ch Surg, "Rehabilitation Program", 27 Sep 1943, is rescinded.

By order of the Chief Surgeon:


H. W. DOAN,
Colonel, Medical Corps,
Executive Officer.

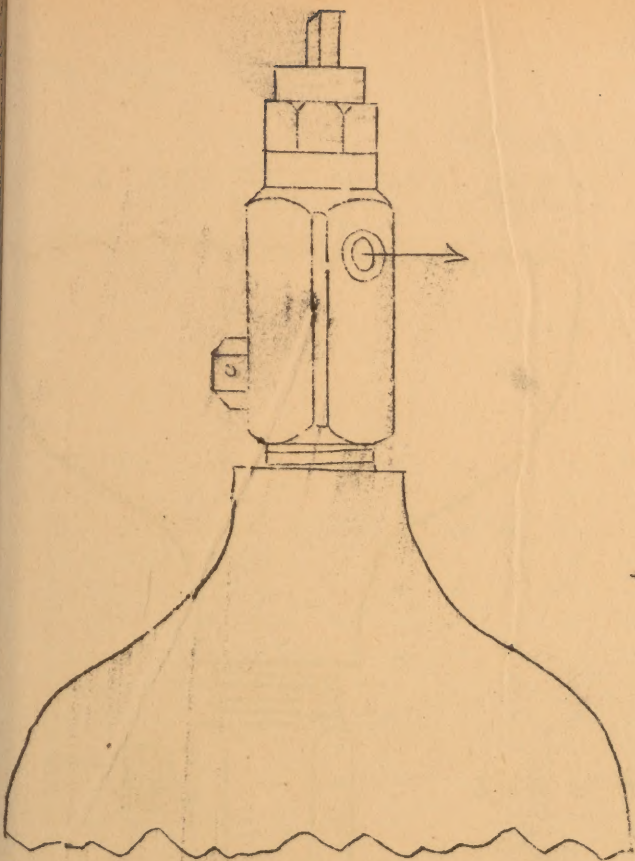


Fig. 1

American valve on small cylinders

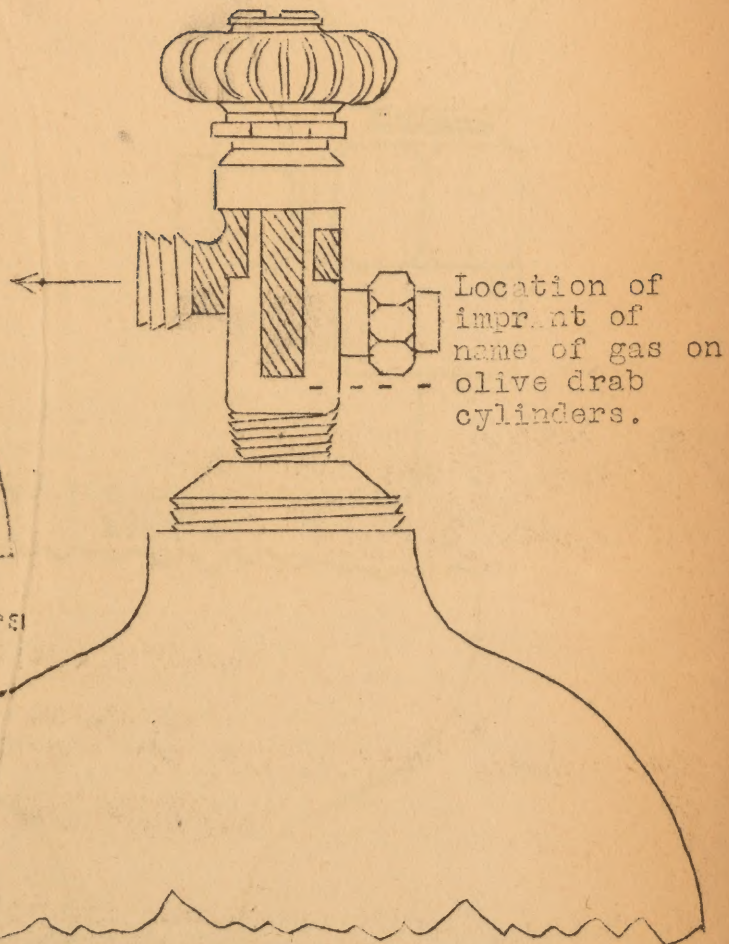


Fig. 2

American valve on large cylinders

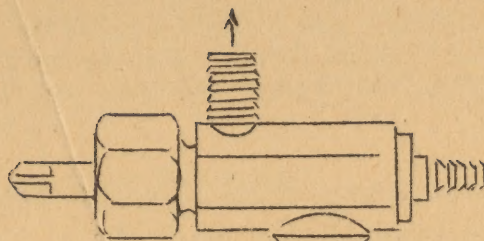


Fig. 4
Type 8. Angled valve, British

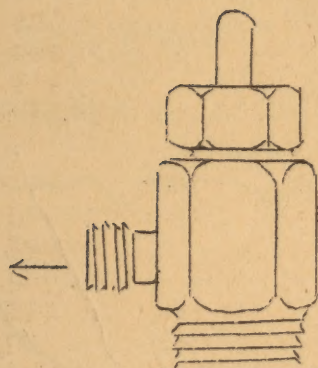


Fig. 3
Type 7. Straight valves, British

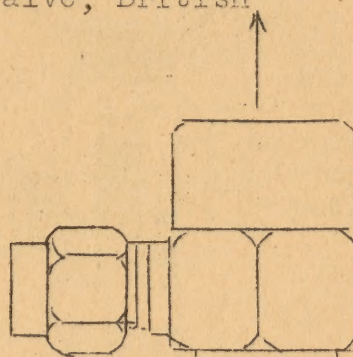


Fig. 5
Bullnose valve, British